

108501  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: Tolerance for Prowl N-(1ethylpropyl)-3, 4,-  
dimethyl-2, 6-dinitrobenzeneamine on Sunflowers  
(0.1 ppm)

DATE: February 18, 1977

FROM: Toxicology Branch

TO: Special Registration Section  
Ms. Libby Zink

Pesticide Petition 7G1896  
Petitioner: American Cyanamid Company

Conclusion:

1. Establish temporary tolerance.
2. Inform petitioner that a cataract study is needed for this compound.
3. Grant EUP.

Substance identification -  
See title, CL 92553, AC 92553.

Referenced Petition:

4G1451, 5F1556

Review:

No new toxicology studies were submitted, prior reviews, see above petitions and memo of February 22, 1975. The toxicity studies submitted on this chemical and the 4E Formulation are summarized as follows:

Acute tests (technical)

oral LD50rat	1.05 g/kg female	1.25 g/kg male
oral LD50mouse	1.34 g/kg female	1.62 g/kg male
dermal LD50rabbit	>5 g/kg	
skin irritation (rabbit)	not irritating	
eye irritation (rabbit)	not irritating	

Acute tests 4E formulation

oral LD50rats	3.38 g/kg
dermal LD50rabbit	>2 ml/kg (judged from subacute study)
skin irritation rabbit	moderate to severe irritant
eye irritation rabbit	very slight and reversible irritation

*to test ocular capacity - see review (8/15/77 - Spencer)*

Subacute and long-term tests

21 day dermal (rabbit)

No effect for 1g/kg/day technical, slight to moderate erythema and edema for 2 ml/kg/day of 4E formulation

90-day rat feeding study

NEL 500 ppm

90-day dog feeding study

NEL 62.5 mg/kg (2500 ppm).

2-year rat feeding study

NEL 500 ppm, no oncogenic effects

18 months mouse study

NEL 500 ppm, no oncogenic effects

3 generation study rats

NEL 500 ppm

Teratology (rat)

No effect at 1g/kg/day

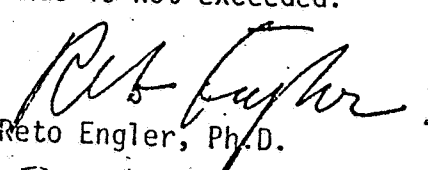
Dominant lethal study

No effect at 2500 ppm (highest dose)

Effects on male mammary glands

No effect at 5000 ppm (highest dose)

The ADI for man can be calculated based on long-term studies and is 15 mg/day for a 60 kg man. All tolerances which are established under 180.361 and all pending tolerances are at the 0.1 ppm level, the ADI thus is not exceeded.

  
Reto Engler, Ph.D.

*E/CEP 2/22/77*